

Abstract

5 The present invention discloses a method for locating a
mobile station, comprising the steps of using fixed
transmitting stations (BS1, BS2, BS3) for locating a
target mobile station (MS1) by transmitting a measurement
signal from each fixed transmitting station to said
mobile station, using a relay station (MSN1 - MSN5) which
10 is adapted to receive said measurement signal from the
corresponding fixed transmitting station and to forward
said signal to said target mobile station (MS1), in case
a direct transmission from one or more of said fixed
transmitting stations (BS1, BS2, BS3) is not available,
15 and determining the distance between said target mobile
station (MS1) to the fixed transmitting stations and/or
the relay stations on the basis of said measurement
signal, and locating the position of said target mobile
station on the basis of the determined distances. By the
20 this method, it is possible to locate a mobile station
even if there is no a direct connection via air to
neighbouring base stations.

(Fig. 2)

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